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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,491	01/09/2004	David W. Gohl	163.1847US01	6176
43896	7590	08/14/2006	EXAMINER	
ECOLAB INC. MAIL STOP ESC-F7, 655 LONE OAK DRIVE EAGAN, MN 55121			DOUYON, LORNA M	
			ART UNIT	PAPER NUMBER

1751

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/754,491	<b>Applicant(s)</b> GOHL ET AL.	
	<b>Examiner</b> Lorna M. Douyon	<b>Art Unit</b> 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6, 9-21 and 23-34 is/are pending in the application.
- 4a) Of the above claim(s) 23-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 9-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. This action is responsive to the amendment filed on June 14, 2006.
2. Claims 1-4, 6, 9-21, 23-34 are pending. Claims 5, 7, 8 and 22 are cancelled. Claims 23-34 are withdrawn from consideration.
3. Applicant's election of Group I, claims 1-22 in the reply filed on June 16, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
4. This application contains claims 23-34 drawn to nonelected invention. **A complete reply to the final rejection must include cancellation of nonelected claims** or other appropriate action (37 CFR 1.144) See MPEP § 821.01.
5. The objection to the disclosure for minor informalities is withdrawn in view of Applicants' amendment. It is suggested, however, that the corresponding Publication Number of the cited copending application on page 22, line 22 be added into the specification.
6. The rejection of claim 2 under 35 U.S.C. 112, second paragraph, is withdrawn in view of Applicants' amendment.

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7. The rejection of claims 1-2, 5-13, 15-17, 19-22 under 35 U.S.C. 102(b) as being anticipated by Barnes (US Patent No. 4,988,363) is withdrawn in view of Applicants' amendment.

8. The rejection of claims 1-2, 5-7, 11-13, 15-16, 20-22 under 35 U.S.C. 102(b) as being anticipated by Macbeath (US Patent No. 5,716,923) is withdrawn in view of Applicants' amendment.

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1-2, 6, 12, 13, 15, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruck (US Patent No. 4,388,077).

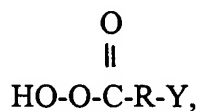
Ruck teaches washing denim garments with a washing composition for 6 minutes, cold water rinsed for 2 minutes and spun dry at high speed for 4 minutes, wherein when the composition was included in amounts of 3 lb/60 Imp. Gal., the initial solution pH was found to range from about 7.0 to 8.1 depending on the water hardness and the solution pH just prior to the rinse cycle ranged from about 6.4 to 6.8 (see col. 4, line to col. 5, line 17). The washing composition comprises amphoteric surfactant such as Ammonyx 2000 - a distearylethylbenzyl ammonium chloride, sodium perborate, trisodium phosphate, carboxymethyl cellulose, sodium carbonate and optical brightener (see col. 4, lines 20-34). The draining step is an inherent step

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prior to the cold water rinse. Ruck teaches the limitations of the instant claims. Hence, Ruck anticipates the claims.

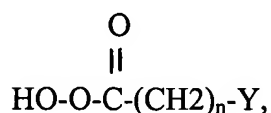
11. Claims 1-2, 6, 9-13, 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes (US Patent No. 4,988,363).

Barnes teaches a method for washing and cleaning of fabrics using a detergent composition containing an organic peroxyacid (which is an activator, and also equivalent to the bleaching and antimicrobial composition of the instant claims) in an effective amount to bleach said fabrics, a surfactant and a detergent builder each present in an effective amount to clean said fabrics, comprising the steps of contacting the fabric with an aqueous solution of said detergent composition at a pH of above 9, preferably from 9.5-11.0 for about 4-10 minutes, and thereafter acidifying the aqueous solution to a pH of 7.3-8.5 for the rest of the washing period (see claim 1; col. 2, lines 41-48). Generally, a washing time at the low pH range of 10 minutes to not more than 30 minutes will be sufficient (see col. 2, lines 59-60). The acidifying step is accomplished by adding an acid, e.g. sulphuric acid to the aqueous solution or wash liquor (see col. 3, lines 26-29). Alternatively, the acidifying is provided with a pH-profiling means, for example by using a sachet containing an acidic substance or encapsulated or coated acid particles which release the contents at a pre-determined time in the wash liquor (see col. 3, lines 30-34). The organic peroxyacid compounds used are the organic peroxyacids and water-soluble salts thereof having the general formula:



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wherein R is an alkylene or substituted alkylene group containing 1 to 20 carbon atoms, and Y is hydrogen (see col. 5, lines 17-42). Barnes also teaches that when the organic peroxyacid is aliphatic, the unsubstituted acid may have the general formula:



wherein Y can be hydrogen and n can be an integer from 6 to 20 (see col. 5, lines 43-58), which includes peroxyoctanoic acid. Other bleaching agents, e.g. hydrogen peroxide adducts, such as perborates or percarbonates, may also be incorporated as additional bleach, provided they do not affect the basic pH-profile principle (see col. 6, lines 31-35). Optical brighteners and perfumes can also be added in varying amounts as desired (see col. 6, lines 53-55). In Example 1, Barnes teaches pH-profiling experiments carried out in a Miele ® 423 washing machine (which is understood to have a draining step) using a detergent composition comprising sodium carbonate (equivalent also to the pH adjusting agent required in claim 10) and diperoxy dodecanedioic acid (DPDA), and 4 mmoles/l H<sub>2</sub>SO<sub>4</sub> were added at various times under the following wash conditions: 40°C heat-up cycle (20 minutes total wash time), 20° F.H. water for the main wash and 20° F.H. water in the rinse cycle, and the best combination of detergency and bleaching is clearly obtained if the wash is correctly profiled at a high pH for 4-10 minutes, particularly for 5-6 minutes, and subsequently at lower pH for the rest of the washing time (see col. 6, line 65 to col. 8, line 10). Barnes, however, fails to specifically disclose an initial pH (equivalent to the second pH of the present claims) in the range from about 2 to about 8.

As the word “about” permits some tolerance (see *In re Ayers*, 69 USPQ 109, and *In re Erickson*, 145 USPQ 207), the lower limit of pH of above 9 of Barnes may be considered to read

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on the upper limit of about pH about 8 of the present claim 1. Even assuming the pH do not overlap, absent unexpected results, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium MetalsCorp. of America v. Banner*, 778F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.05I.

12. Claims 1-2, 6, 11-13, 15-16, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macbeath (US Patent No. 5,716,923).

MacBeath teaches a method for cleaning soiled laundry in a washing machine comprising contacting said laundry with a wash solution formed by dispersing therein an effective amount of a composition comprising an alkali metal percarbonate bleach, peroxyacid bleach precursor (both being equivalent to the bleaching and antimicrobial composition of the instant claims) and an acidification agent, such that the initial pH of said wash solution prior to release of said acidification agent is from 9.5 to 13.0, and such that the pH of said wash solution is from 9.3 to 7.0 subsequent to complete release of said acidification agent (see claim 16; col. 2, lines 9-17), and which inherently provides a draining of the wash solution followed by a rinsing cycle. Typically, complete release of said acidification agent occurs in a time period of from 30 seconds to 10 minutes, preferably from 2 minutes to 8 minutes, most preferably from 3 minutes to 7 minutes after introduction of the composition to the wash solution (see col. 4, lines 23-31). The acidification agent is coated to provide the delayed release (see col. 4, lines 32-40). Fabric softening agents can also be incorporated into the detergent composition (see col. 13, lines 55-58), as well as perfumes (see col. 14, line 22). McBeath, however, fails to specifically disclose an

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initial pH (equivalent to the second pH of the present claims) in the range from about 2 to about 8.

As the word “about” permits some tolerance (see *In re Ayers*, 69 USPQ 109, and *In re Erickson*, 145 USPQ 207), the lower limit of pH 9.5 of McBeath may be considered to read on the upper limit of about pH about 8 of the present claim 1. Even assuming the pH do not overlap, absent unexpected results, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.05I.

13. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruck, Barnes or McBeath as applied to the above claims, and further in view of Reinwald et al. (US Patent No. 4,118,189), hereinafter “Reinwald”.

Ruck, Barnes or McBeath teaches the features as described above. Ruck, Barnes or McBeath, however, fails to disclose washing the laundry with a detergent use solution from the laundry washing machine prior to the step of applying the detergent containing peroxyacid, or draining at least a portion of the detergent use solution from the laundry washing machine prior to the step of applying the detergent containing peroxyacid.

Reinwald teaches a washing process which can be carried out in several, preferably two steps, replacing the wash liquid in between and this method is recommended particularly for greatly soiled wash (see col. 4, lines 5-7). The first stage, the so-called pre-wash cycle, can be carried out in known manner which serves primarily to remove coarse soil, the prewash liquor is



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removed before the start of the main wash cycle (see col. 4, lines 7-18). The method is carried out by using conventional cleaning compositions which include bleaching agents and bleach activators (see col. 4, lines 38-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to subject the laundry of Ruck, Barnes or McBeath to a pre-wash cycle, remove the prewash liquor, prior to the main wash cycle because this would remove coarse soil as taught by Reinwald.

14. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruck, Barnes or McBeath as applied to the above claims, and further in view of Werdehausen et al. (US Patent No. 3,718,597), hereinafter "Werdehausen".

Ruck, Barnes or McBeath teaches the features as described above. Ruck, Barnes or McBeath, however, fails to disclose a halogen bleach like chlorinated trisodium phosphate or sodium hypochlorite.

Werdehausen teaches the equivalency of alkali metal perborates and percarbonates with chlorinated trisodium phosphate or alkali metal hypochlorite as bleaching agents in a similar method (see claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the perborates or percarbonates of Ruck, Barnes or McBeath with chlorinated trisodium phosphate or alkali metal hypochlorite because the substitution of art recognized equivalents as shown by Werdehausen is within the level of ordinary skill in the art.

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15. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruck or MacBeath as applied to the above claims, and further in view of Barnes.

Ruck or MacBeath teaches the features as described above. Ruck or MacBeath, however, fails to specifically disclose peroxyacids like peroxyoctanoic acid, or an activator.

Barnes teaches the features as described above. In particular, Barnes teaches the equivalency of perborates or percarbonates with organic peroxyacids (which are also activators), which include peroxyoctanoic acid, as bleaching agents (see col. 6, lines 30-35; see col. 5, lines 43-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the perborate or percarbonate of Ruck or Macbeath with organic peroxyacids like peroxyoctanoic acid because the substitution of art recognized equivalents as shown by Barnes is within the level of ordinary skill in the art.

### ***Response to Arguments***

16. Applicant's arguments filed June 14, 2006 have been fully considered but they are not persuasive.

With respect to the rejection based upon Barnes or MacBeath, Applicants argue that Applicants have amended claim 1 to call out a method for treating laundry where a laundry composition is applied at a pH from about 2 to about 8 and thereafter the pH is adjusted to a pH from about 5 to 11 which distinguishes from Barnes where the pH of the composition is adjusted from a high pH (about 9 and preferably from 9.5 to 11.0) to a low pH (below 9, preferably from

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7.3 to 8.5), or from MacBeath where the composition is adjusted from a high pH (about 9.5 to 13.0) to a low pH (from about 9.3 to 7.0).

As stated, above, the word “about” permits some tolerance (see *In re Ayers*, 69 USPQ 109, and *In re Erickson*, 145 USPQ 207), the lower limit of pH above 9 of Barnes or pH 9.5 of McBeath may be considered to read on the upper limit of about pH about 8 of the present claim 1. Even assuming the pH do not overlap, absent unexpected results, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium Metals Corp. of America v. Banner*, 778F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.05I.

With respect to the obviousness rejections of several dependent claims over additional references, Applicants argue that the rejections are moot in light of the amended claims for at least the reasons discussed above with respect to Barnes and MacBeath.

The response above to Barnes and MacBeath apply here as well. Hence, the obviousness rejection of the dependent claims are proper and maintained.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after


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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Lorna M. Douyon  
Primary Examiner  
Art Unit 1751